

- Remarks upon the Breeding of the Rufous Tinamou (*Rhynchotis rufescens*) in the Society's Menagerie. P. Z. S. 1867, p. 687.
- On the Incubation of the Apteryx. P. Z. S. 1868, p. 329.
- Remarks upon the Habits of the Hornbills (*Buceros*). P. Z. S. 1869, p. 142.
- Remarks upon the Habits and Change of Plumage of Humboldt's Penguin. P. Z. S. 1879, p. 6.
- Remarks upon the Habits of the Darter (*Plotus ankinga*). P. Z. S. 1881, p. 247.
- Remarks upon the Moulting of the Great Bird of Paradise. P. Z. S. 1887, p. 392.

Bartlett left behind him two sons, both of whom inherit their father's tastes and follow similar pursuits. Mr. Edward Bartlett, well known from his collecting-expeditions in South America and elsewhere, has just returned to England, after a lengthened service as Curator of Rajah Brooke's Museum at Kuching, Sarawak, Borneo. Mr. Clarence Bartlett was for twenty-four years Assistant-Superintendent of the Zoological Society's Gardens, and has now succeeded to his father's post.

We have also to announce, with much regret, the recent death of another Member of the British Ornithologists' Union—Mr. Charles Bygrave Wharton. We hope to give a notice of this gentleman in our next number.

XXXVII.—*Letters, Extracts, Notices, &c.*

WE have received the following letters, addressed "to the Editors of 'The Ibis'":—

SIRS,—A cruise in the Levant for six weeks does not afford many opportunities for observing and noting ornithological facts, but the following notes may possibly interest some students of migration.

On the 16th of this month (March) we struck camp and started at daybreak to ride down the little-known pass from Bethel to Jericho. Just after sunrise, on the brow of the ridge, which looks down 3600 feet into the Jordan Valley, we observed a flock of White Storks circling and wheeling

close overhead. They may have been 400 or 500 in number. After thus taking a survey of the land, in a few minutes they suddenly started off in a long line to the north. The only other migrants we observed during our ride in any great numbers were small flocks of the Continental White Wagtail leisurely working their way to the north, alighting on each hillside as they traversed deep wadys which intercepted their course.

In the evening, when standing on the mounds of old Jericho, commanding a magnificent view of the Dead Sea and Jordan Valley, we noticed a long black line, apparently level with the crest of the Gillead range opposite, stretching as far as the eye could reach, which was at least 60 miles from south to north. By our field-glasses we at once saw that this line was composed entirely of White Storks. There must have been tens of thousands, for they were nearly an hour in passing us and appeared to be closely packed. It was most interesting to watch every now and then one, two, three, or four birds drop singly out of the mass and rapidly descend to the ground. These evidently were the travellers whose summer home was near the wayside stations of the journey. A pair of these flew right across the valley and settled on a little hill behind us, being the occupants of the ruined castle above. Most, however, appeared to strike off to the eastward, where, in Bashan and Gillead, they breed abundantly.

When at Ephesus, a fortnight before, I had noticed the remains of Stork-nests upon the top of every column and ruin, and our guide remarked that they would be back in a fortnight.

I was struck by remarking in Mr. Gray-Hill's book on the Beduin that he, too, had noticed a similar phenomenon on the 16th of March, 1887.

It was near the full moon that evening, and turning out to gaze at that wondrous black sky and see a molten silver disc below it, I noticed a moving black cloud passing between the moon and myself. The cloud seemed one solid mass, but under the glass resolved itself into serried masses of birds

steering northward in perfect silence ; at least nothing was audible, and they were at too great an elevation for the swish of their wings to be detected. I fancy they must have been Starlings.

Early next morning I mounted my horse and rode about among the, to me, familiar thickets, where, in years gone by, I had reaped a rich ornithological harvest. My old friends, the habitual denizens of this tropical oasis, were there, as of yore, but not a migrant could I see. There were Bulbuls, Cisticoles, Bush-Babblers, and Snipes in abundance, but not a Turtle-Dove, Quail, or Shrike could I detect. After a long day by the Dead-Sea shore, I returned, an hour and a half before sunset, to our camp. Every step of my horse put up one or two Quails, which dropped, evidently utterly exhausted, after a flight of three or four yards. Every bush held two or three of *Emberiza caesia* ; the Great Grey Shrike was sitting solemnly on a bare twig, with a commanding outlook, as though he had never stirred since I left the spot three years ago ; while the common Turtle-Dove absolutely swarmed in countless numbers on the ground and trees alike. Now all these birds must have arrived during the course of the day, for they could not have escaped me in the morning, and several of them (such as the Quail and the Bunting) do not remain to breed in the valley, but nest in the uplands.

There can be no doubt, as I have before remarked, that this narrow gorge of the Jordan Valley is one of the great arterial migration-routes from East and Central Africa to Eastern Europe and Western Asia.

Many years ago I described in your pages the migrations of Swallows and other birds by this route. It would seem as though the caravans of migrants muster at the great lakes, and then from the valley of the Nile cross the low-lying narrow flat to Akabah, where, uniting with those which have skirted the Red-Sea shore, they follow up the Akabah, the Jordan Valley, and the Orontes Valley to the Taurid range, where, about the head-waters of the Euphrates, they disperse east and west to their summer-quarters.

So far as I can learn, the migrants down the Nile diverge eastward on arriving at the Delta, and in the upper valley of the Euphrates I have noticed vast flocks arriving from the southward.

Yours, &c.,

Jerusalem, March 31st, 1897.

H. B. TRISTRAM.

[Most of our readers will be aware that at the date of the despatch of this letter our much-valued friend and correspondent had recently met with a sad accident, his leg having been broken by the kick of a mule. We are much pleased to be able to announce, however, that Canon Tristram has made a good recovery and is now at home again.—EDD.]

SIRS,—It is with some surprise that, on referring to Professor Newton's 'Dictionary of Birds' (Introduction, p. 2), I find that there still seems to be need of a report by an ornithologist with regard to the species of two of the Geese in the celebrated fresco found in a tomb at Meïdoun. I therefore send you the following brief remarks.

For the benefit of those who may have forgotten the history of the picture, I quote the following from the Catalogue of the Museum at Ghizch, Cairo, where the picture is numbered 3 in the collection:—

"3. *Prisé et stuc.* Haut. 0^m,29, long. 1^m,74. Cat. Mar. p. 205.—*Meïdoun.*

"Oies paissant, très jolie fresque pleine de vie et de gaieté. Cette scène et le hiéroglyphe peint qu'on voit plus haut proviennent d'un tombeau de Meïdoun que Mariette jugeait antérieur à l'époque des grandes pyramides."

Mariette assigns to the IVth dynasty, by whom these pyramids were built, the dates of 4235 to 3951 B.C., so that, according to him, the picture of the Geese must be at least older than that date. Other Egyptologists differ from Mariette, and assign to the IVth dynasty a period either about 1000 years before or after that given by him; but, in any case, the picture must date at least from a period of some 3000 years before the Christian era.

According to Professor Newton (*op. cit.* p. 2, footnote), "a *fac-simile* of the picture is, or was, a few years ago, exhibited at the Museum of Science and Art in London, and the portion containing the figures of the Geese has been figured by Mr. Loftie ('Ride in Egypt,' p. 209)," to whom Professor Newton was indebted for the opportunity of examining a copy made on the spot by an accomplished artist.

There are six Geese in the picture, and, as Professor Newton states, "Four of these figures can be unhesitatingly referred to two species (*Anser erythropus* and *A. ruficollis*) well known at the present day; and if the two remaining figures, belonging to a third and larger species, were re-examined by an expert, they would very possibly be capable of determination with no less certainty."

These two larger Geese are placed one at each end of the series in the picture, and I made a careful examination of them during a recent visit to the Ghizeh Museum, especially as Professor Newton had been good enough to write and remind me about them, stating that he thought that the specific points had been neglected by the copyist who made the *fac-simile* which he saw in London some years ago.

These two Geese have their bills yellow, tipped and shaded with a darker colour. That on the left of the picture has the lower mandible heavily tipped with black, while that on the right has no such dark tip, but has the upper mandible slightly tipped with brown, as are also the bills of the two specimens of *A. erythropus*. All the four Grey Geese have the bills and legs of the same colour—yellow—and the claws black.

The shoulders of the two larger Geese are of the same *brown* colour as the rest of their bodies, and are similar to those of the two *A. erythropus*. The only parts of the plumage which are coloured darker than the rest are the primaries.

The artist evidently recognized clearly the presence of the dark bars on the underside of *A. erythropus*, and also the white forehead, and has brought out these characteristics well in the painting, as he has also in the case of the clearly-

marked plumage of *A. ruficollis*; but I do not think that he was aware of the existence of such smaller specific differences as the colour of the nail of the bill; in fact the *brown* tip which he has given to the bills of his two specimens of *A. erythropus* seems to prove this. I fancy that he only meant to portray a "*Grey Goose*," without reference to species, which he probably did not know how to distinguish.

At all events, the colours of the bills and shoulders of the two larger Geese absolutely preclude us from identifying them with either the Grey-Lag or the Pink-footed species, so that if they are to be referred to any species in particular, that species must be the Bean (*A. segetum*), and with this species the larger size of the bills of the two figures in the picture seems to agree.

They are, however, to my mind, very poor representations of *A. segetum*, and rather resemble the nondescript kind of Geese which may be seen frequently in farmyards in Egypt.

My opinion is that either the artist did not know of the characters which distinguish the various species of Grey Goose among themselves (with the exception of the White-fronted species), or else his intention was to depict both wild and tame Geese together—a course of procedure which would, I think, be quite in keeping with the methods of the artists who produced the beautiful series of animal-drawings on the Tomb of Thi, at Sakkârah, which are said to date from about B.C. 3500. The latter drawings show conclusively, I think, that the Egyptians of those early times had both tame Geese and tame Ducks.

Yours &c.,

GERALD E. H. BARRETT-HAMILTON.

S.S. 'Victoria,' Indian Ocean.

April 27th, 1897.

The Collection of Birds'-eggs in the British Museum.—The great collection of birds'-eggs in the British Museum, which was arranged under the direction of Seebohm shortly before his death, contains about 48,000 specimens, and is, no doubt, by far the most extensive collection of these objects in

existence. It is contained in 35 cabinets, with about 24 drawers in each cabinet, and follows the systematic order of the Bird Catalogue. In it are comprised, besides the old collection, the large collections of Gould, Hume, Salvin and Godman, and Seebohm. It is thus rich in Indian, Palæarctic, Australian, and Central-American eggs, but comparatively poor in South-American and African forms. A Handbook of General Oology, based upon this splendid series, would be a most valuable work, and will, we trust, shortly be undertaken. Nothing of the sort has been published since the appearance of Des Murs's 'Traité Général d'Oologie Ornithologique' in 1860.

The late Wilh. Hollandt's Collection of Birds'-eggs.—The extensive collection of birds'-eggs formed by the late Wilhelm Hollandt has been bequeathed, as we learn from a communication made by Dr. Wilhelm Blasius to the Verein für Naturwissenschaft zu Braunschweig, to the Ducal Museum of Brunswick. It contains 10,162 specimens, referred to 2710 species, and embraces examples of the eggs of 103 families out of the 116 acknowledged by G. R. Gray in his Hand-list, according to which it was arranged and catalogued by its late owner.

The Gütke Collection of Birds.—The Gütke Collection of Birds and Eggs and the Library annexed are now, as Dr. Clemens Hartlaub kindly informs us, the property of the Prussian State, and have been placed under the control of the Royal Biological Institution in Heligoland. It is expected that they will be removed into the new museum in Heligoland in the course of the present summer and rendered accessible to the public. The specimens of birds, some of which were in a very bad condition, are being carefully examined and repaired by an experienced taxidermist. New additions continue to be made to the series, amongst which are a melanistic variety of *Alauda tartarica* and examples of the Spoonbill and of *Puffinus major*.

The Museum of Pará.—In the April number of the 'Zoologische Garten,' Herr Meerwarth, assistant in the Museu Paraense (of which our excellent correspondent, Dr. Emil Goeldi, is Director), gives an account of the new Zoological Garden attached to the Museum, and adds a description of the principal buildings and a list of the species of vertebrates of which examples are exhibited. The birds consist of 224 individuals, belonging to 70 species, mostly Amazonian forms. Among these are specimens of *Harpyia destructor* and *Eurypygia helias*, and of three species of *Psophia*.

*The Tristram Collection of Birds**.—By far the most important event in the history of the Liverpool Collections during the past year has been the acquisition of the Tristram Collection of Birds. This is an historical collection, long recognized among ornithologists as one of the first importance. It was, if not the last, almost the last, of the great undispersed private collections which were amassed by wealthy cultivators of this science in England during the past half-century or more, nearly every one of which has now become incorporated in the National Museum of Natural History at South Kensington, either by gift or by purchase. No such general collections are now being made. Ornithologists, as a rule, now restrict themselves—owing to the magnitude of the subject—to collecting and studying the birds of one, or even part of one, region, or the species of a single family, or of a few families at most. One of the earliest and most important of such general collections was brought together at Knowsley by the 14th Lord Derby, who, by bequeathing it to the City of Liverpool, laid the foundation of the present Museum.

This new acquisition was formed by Henry Baker Tristram, D.D., LL.D., F.R.S., Canon of Durham Cathedral, its foundation dating from the year 1844, when, an undergraduate, he began to collect British and European birds. Having, soon after that year, accepted an official post in

* Extracted from the Forty-fourth Annual Report of the Committee of the Public Libraries, Museums, and Art Gallery of the City of Liverpool for the year ending 31st December, 1896.

Bermuda, he devoted his leisure to collecting the birds of the West Indian Islands.

Visits to North America followed, which resulted in large additions of the avifauna of that region being amassed. As is widely known, Canon Tristram has, at various periods of his life, paid extended visits to Palestine and Syria, as well as to the countries of Northern Africa on the Mediterranean Littoral, to the Sahara Desert, the Canary Islands, and to Madeira, for the purpose of increasing his collection. Accordingly the birds of all these regions are well represented in it. In every case the birds described and figured in his various works, in 'The Ibis,' and in the 'Proceedings' of the Zoological Society of London, were retained in his own cabinet, and these types add much to the intrinsic as well as to the historical interest of his collection.

During a visit paid at a later period to Japan, Dr. Tristram obtained a large series of rare and interesting species of Eastern Palæartic birds, and on his way through America he lost no opportunity of acquiring species from that region still desiderata in his cabinets. Besides his personal contributions to his collection, Dr. Tristram has maintained, throughout his life, an extensive correspondence with naturalists, travellers, missionaries, consuls, and officers of Her Majesty's Army and Navy in most quarters of the globe, many of whom he was the means of inspiring with some of his own love of ornithology, inducing them to collect and investigate the bird-life of many little-visited regions and send home the fruits of their investigations. Through these agents, by exchange, purchase, or gift, the Tristram Museum obtained annually large accessions. Special attention was given by the Canon to the birds of the Oceanic Islands, chiefly of the Pacific and Indian Oceans, and the collection, which is specially rich in this department, has been, as he himself has remarked, "most valuable in the study of types under changed conditions, and especially in isolation." There are, in the collection, specimens of a number of species now extinct, and so rare that but very few museums anywhere possess examples. Of these may be mentioned the Labrador Duck (*Camptolæmus labradoricus*),

the Norfolk-Island Parrot (*Nestor productus*), and the Rarotongan Flycatcher (*Monarcha dimidiata*); besides a number of bones of the Great Auk (*Alca impennis*).

The Tristram Collection is poorer in South-American birds than in those of any other region. In the birds of that region, however, the famous collection of the 14th Earl of Derby, presented to the Museum in 1851, is singularly rich, so that the two collections supplement each other in a most unexpected manner, and it will be found that the entire collection of birds belonging to the Corporation, when the general catalogue, now in progress, has been completed, is second only to that in the British Museum. What the number of species and specimens in the Derby Collection may be it is impossible, as yet, to say, as no catalogue at all approaching completeness exists; but it is well known to contain a very large number of specimens of, perhaps, even greater historical interest than the Tristram Collection, as they were obtained in the great voyages of the end of the last century. So far as the catalogue has progressed, there are indications that a number of untraced types and historical specimens will be found to have been buried in the Derby cabinets.

Restored Skeleton of Æpyornis.—Amongst the numerous objects of scientific interest at the Royal Society's Convezazione on May 19th was a restored skeleton of the *Æpyornis hildebrandti* of Burckhardt, put together in the British Museum from the numerous bones of this form recently obtained by Dr. C. I. Forsyth Major at Sirabé, in Madagascar. This is the first skeleton of the *Æpyornithidæ* articulated, and is nearly complete. It stands about 62 inches (= 158 cm.) in height.

Movements of Ornithologists and Collectors at home and abroad.—Mr. E. W. Oates has quitted Burmah for England, and will shortly take up his permanent residence in or near London. We are much pleased to be able to rank our friend again among the ornithologists of the metropolis. There is an ample field at home for the exercise of his abilities and powers of work.

Mr. J. E. S. Moore has returned home from his expedition to Lake Tanganyika, and is now busily engaged in working out the results. Among his collections is a small series of birds, but his attention was principally directed to the lacustrine fauna. Mr. Moore gave an account of his general zoological results at the Meeting of the Zoological Society on the 4th of May last, and exhibited a very interesting series of his specimens at the Royal Society's Soirée on May 19th.

Mr. Alexander Whyte, F.Z.S., has come home from Nyasaland to enjoy a well-earned rest upon retiring from the service of the British Central-African Administration. His extensive collections from the Nyika plateau, in North Nyasa, are being worked out at the British Museum, and we hope soon to be able to give our readers an account of the birds, which Capt. Shelley is now engaged upon. Another collection, obtained by Mr. Whyte from the mountain-district north of Zomba, has also recently arrived, and further collections are on their way home.

Mr. and Mrs. Lort Phillips carried out another very successful expedition to the hills of Somaliland last winter, and brought back a fine series of birds, of which we hope to be able to give an account in a future issue. As will be seen by our report of the proceedings of the B.O.C. (above, p. 448), examples of several new species were obtained. Mr. and Mrs. Lort Phillips have now left England again for their summer-quarters in Norway.

Mr. Joseph J. S. Whitaker returned to Palermo at the beginning of May from a short, but not unsuccessful, ornithological raid into Tunisia, only regretting that he could not remain longer in the country. Among the nests taken were those of *Saxicola mæsta*, *S. leucura*, *Emberiza saharae*, *Erythrospiza githaginea*, and *Otis houbara*. Mr. Whitaker took three nests of *Saxicola mæsta*, with eggs in them, with his own hands. He discovered a place where *Chersophilus duponti* is comparatively abundant, and hopes to obtain its eggs on another occasion.

Mr. Robert L. Perkins has now finally returned to England from the Sandwich Islands, where, as our readers know, he

has been engaged for some years in the investigation of the strange zoology of that group. We earnestly hope that he may have further contributions to offer us on the history and habits of the Hawaiian birds. His recent collections from the islands of Kauai, Hawaii, Oahu, and Maui number about 230 skins, of which the first set, according to the arrangement made by the joint Committee of the Royal Society and British Association, will go to the British Museum and the second to Cambridge.

At the date of his last letter (Jan. 24th, 1897), Mr. J. Graham Kerr was still at "Waikthlatingmayalma," in the Chaco Boreal of Paraguay, and, although successful in his pursuit of *Lepidosiren paradoxa*, was unhappy at the poverty of mammals and birds. Of the latter he had met with examples of about 100 species, of the former of only two or three! There had been rain, heavy and continuous, for three weeks, and the surrounding country was nearly all under water.

Mr. Charles W. Andrews, of the Geological Department of the Natural History Museum, has received leave of absence from his duties in order to undertake, on behalf of Dr. John Murray, F.R.S., a complete investigation of the Fauna and Flora of Christmas Island, which lies in the Indian Ocean in about 11° S. lat., off Java. Mr. Andrews has left England for Batavia, whence a vessel will be provided to take the exploring party to its destination.

Two good collectors are hard at work in British East Africa, and will, no doubt, do much to work up the details of its rich and varied fauna. Mr. F. J. Jackson, who has already made such splendid collections of birds in East Africa, is now Resident at Ravine Station, at the edge of the Mau plateau. Dr. Hinde, who is stationed at Machako's, about 300 miles from the coast, has already sent several collections of birds to the British Museum.

Mr. Stanley Flower (Lieut. 5th Fusiliers), who has lately taken up an appointment as Curator of the Royal Museum at Bangkok, has been making a collecting-expedition up the rivers to the east of Bangkok, and sends home most lively accounts of his adventures among the natives and wild animals. Mr. Flower pays special attention to mammals

and reptiles, but does not neglect birds, and will doubtless eventually add much to our knowledge of the still imperfectly-known avifauna of Siam.

Mr. G. E. H. Barrett-Hamilton left England again in April last to resume his duties as one of the Naturalists on the English Commission for the investigation of the "Sealeries" of the North Pacific, concerning the proceedings of which during last year a Parliamentary Blue-book has lately been issued. He went first to Egypt, as will be seen by the letter addressed to us given on p. 484. Proceeding eastward, he expected to be at Yokohama on May 30th, to join Professor D'Arcy Thompson, and to arrive at the Kommandorski Islands about the middle of June. Mr. Barrett-Hamilton will not, we trust, forget to observe and collect birds.

Our friends Mr. Henry J. Pearson and Colonel Feilden, accompanied by Dr. Curtis, left England on June 1st to join the yacht 'Laura' at Bergen. This vessel, which has been strengthened and fitted for Arctic service, has been chartered by Mr. Pearson for an ornithological excursion to Barents Sea. The programme of the party is to visit Nova Zembla and the island of Waygats, and to explore the Great Tundra of the Samoyeds from the Ural Mountains westward to the Petshora River. The benevolent protection of the Imperial Russian Government has been accorded to the Expedition, at the request of our Foreign Office and on the recommendation of the Royal Geographical Society. We have no doubt that an abundant harvest will be reaped.

In China our correspondents, Mr. F. W. Styan, Mr. J. D. de La Touche, and Mr. C. B. Rickett, continue to take every opportunity of extending our knowledge of the native avifauna. Mr. Styan sends us, through Mr. Ogilvie Grant, a most interesting narrative of an expedition into the Fohkien Hills undertaken by our three ornithological brethren in December last, prepared for a local journal. A short paper containing the principal results arrived at on this occasion has been also received and will appear in our next number.

The North-east African Hoopoe.—In a recent paper on the birds collected by Dr. Muzioli in Tigré (Boll. Mus. Zool. ed Anat. Comp. Tor. vol. xii. no. 287) I have made some remarks about the Hoopoes of that region, four specimens having been in the collection. While trying to identify these birds, I was at variance with Mr. Salvin, who, in the 'Catalogue of Birds in the British Museum' (vol. xvi. p. 4), had united the North-east African bird with the European *Upupa epops*. When examining the African birds collected by Dr. Muzioli, I found them exactly like those collected in the Bogos country by Antinori (Antin. & Salvad. 'Viaggio Bogos,' p. 58), and in Shoa by the same collector and by Dr. Ragazzi (Ann. Mus. Civ. Gen. (2) i. p. 105, vi. p. 220), and differing from the European Hoopoes in several respects, especially in wanting, or having scarcely perceptible, the white sub-apical spots on the feathers of the crest, and in the smaller dimensions. The African Hoopoes I have attributed (*ll. cc.*) to *U. senegalensis*, Sw.

Dr. Muzioli, having read my remarks on his specimens, writes to me that these Hoopoes certainly belong to a species different from *U. epops*, and his reason for this positive statement is the quite peculiar call of the African birds, utterly different from that of the European Hoopoes, with which Dr. Muzioli is well acquainted: he adds that Hoopoes are very common and extremely numerous in Tigré *at every season*, so that it is quite evident that in North-east Africa there is a *resident* form of *Upupa*. Dr. Muzioli has also noticed that the African Hoopoes lack the disgusting smell of musk which is so strong in the European birds.

These divergences seem to me sufficient to establish the specific distinction of the North-east African Hoopoe, which I have hitherto called *U. senegalensis*. Whether this is its proper name I cannot say quite positively, but I am inclined to believe it. It would be interesting to ascertain how the North-African form differs from the Indian *U. indica*.—
T. SALVADORI, C.M.Z.S.